



Research Article

Teachers' Experiences of Marketization in the United Arab Emirates

تجارب التسويق للمعلمين في الإمارات العربية المتحدة

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Abstract

The compulsory education sector of the United Arab Emirates (UAE) provides insight into the effects of the marketization of education. Quality assurance by UAE government agencies has required international comparative testing, the results of which have highlighted the uniqueness of the school system in the UAE and the need for investigation into teachers' experiences. This study was a part of a mixed-methods investigation of teachers' experiences in marketized systems. Teachers working in for-profit international schools were interviewed. Items were developed based around themes of the initial findings of marketization, control, buffering, and fulfillment. Then, teachers in the UAE were surveyed to find quantitative patterns in their experiences. The findings from the quantitative study show that across types of schools, teachers in the UAE experience the direct effects of a marketized school system and the indirect effects that influence interactions at their workplaces. While the direct effects demonstrate how teachers' work is modified to be more business oriented, the indirect effects reveal the threats teachers feel regarding their professional judgment, hierarchical relationships, and social pressures due to the marketization of schools. Future research should investigate a broader range of schools for how teachers are affected by the marketization of their school.

الملخص

يوفر قطاع التعليم الإلزامي في الإمارات العربية المتحدة نظرة ثاقبة لتأثيرات تسويق التعليم. لدى دولة الإمارات العربية المتحدة نظام قائم على التسويق ضمن الوكالات الحكومية التي تشرف على عدد كبير من المدارس الخاصة والربحية. تطلب ضمان الجودة من قبل هذه الوكالات اختبارات مقارنة دولية، وقد سلطت نتائجها الضوء على تفرد النظام المدرسي في الإمارات العربية المتحدة. في حين أن البحوث السابقة قد حققت في الغالب في التسويق داخل الأنظمة العامة، إلا أن هناك القليل من البحوث حول التأثيرات على عمل المعلمين في أنظمة المدارس عالية التسويق.

الدولية المدارس في العاملين المعلمين مع المقابلات إجراء تم المسوقة. الأنظمة في المعلمين لتجارب الأساليب متعدد بحث من جزءا الدراسة هذه كانت العربية الإمارات في المعلمين مسح تم ذلك، بعد والوفاء. المؤقت والتخزين والتحكم للتسويق الأولية النتائج موضوعات أساس على العناصر تطوير تم الربحية. التأثيرات المتحدة العربية الإمارات في المعلمين يختبر المدارس، من مختلفة أنواع ضمن أنها الكمية الدراسة نتائج تظهر تجاربهم. في الكمية الأنماط لمعرفة المتحدة أكثر ليكون المعلمين عمل تعديل يتم كيف المباشرة التأثيرات توضح عملهم. أماكن في التفاعلات على تؤثر التي المباشرة غير الآثار مُسوق مدرسي لنظام المباشرة وذلك الاجتماعية والضغوط الهرمية، وعلاقتهم المهنية، بأحكامهم يتعلق فيما المعلمون بها يشعر التي التهديدات المباشرة غير الآثار تكشف الأعمال. نحو توجهاً تؤثر لكيفية المدارس من مختلفة أنواع عبر المعلمين عمل على الصلة ذات الأخرى التأثيرات في المستقبلية البحوث تبحث أن يجب المدارس. تسويق بسبب مدرستهم. بتسويق المعلمين

Keywords: Marketization; Teachers' work; Teachers' experiences; Education policy

الكلمات المفتاحية: التسويق، عمل المعلمين، تجارب المعلمين، سياسة التعليم

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1. Introduction

The United Arab Emirates (UAE) provides a unique opportunity to understand the effects of the marketization of schools. The development of education in the UAE fits a global pattern in which the education sector is being sought out to develop new markets and opportunities for profit (Ball, 2018). This is especially true in countries that host many international schools as the demand for schooling is being met by for-profit corporations that view the international school sector as a lucrative and recession-proof investment (Waterson, 2015). The primary and secondary system of education in the UAE is significantly market-based; the marketization of schools may change the character of teachers' work as well as their perceptions of the experiences at work. While arguments in favor of the marketization of schools often focus on finances, student achievement metrics or the perceived benefits of competition, teachers and their role in schools are not given proper attention as part of the conversation. Looking first at the context of schools in the UAE and previous research about the marketization of schools, this article argues for the importance of considering the experiences of teachers in these systems.

The UAE's rapid development and expatriate population boom over the last decades have resulted in an education system markedly different from systems in the Global North on which majority of education research has focused. For instance, expatriate children, who make up 80% of the K-12 school population in Dubai (Dubai Statistics Center, 2019) and about 60% in Abu Dhabi (Statistics Centre Abu Dhabi, 2019) are not allocated school placement within the government-run public system. Rather, they are compelled to attend schools in the country's expanding private sector. This private sector is not required to follow a national curriculum and, instead, is made up of a wide variety of schools catering to the diverse expectations of parents from different nationalities, educational experiences, and socioeconomic backgrounds. The onus falls on for-profit providers to meet the high demand for schooling. The UAE government agencies function primarily to assure the quality of private schools (Department of Education and Knowledge, n.d.; Establishing the Knowledge and Human Development Authority in Dubai, 2006). In doing so, they also play a role in aiding the profitability of for-profit schools and promoting the opening of new schools in the UAE. Schools in the UAE continuously increase their enrollment, competing for students and providing families with a broad range of school choices.

The for-profit international education sector is increasing worldwide. Education businesses in the UAE have become more profitable as they open new schools and diversify their offerings (Ridge et al., 2015). The International Schools Research Group has tracked the growth of international schooling noting a change from 2,584 schools in 2000 to 11,616 in 2020 and income from fees of \$4.9 billion in 2000 up to \$54.0 billion in 2020 (ISC Research, 2020). Consequently, researchers have begun to track the influence and spread of these education management organizations (Waterson, 2015).

The UAE's primary and secondary education system consists of private schools that are market-based, offering various choices to parents, while the UAE government ensures a consistent quality of these offerings. Thus, the expansion of the school system

has been accompanied by increasing accountability measures by the government, including the creation of new agencies to oversee private education and increased participation in international comparative standardized tests. The rapid growth of the private school system in the early 2000s prompted increased government oversight of both government and private schools (Macpherson et al., 2007, p. 2) through the Ministry of Education (MOE), the Knowledge and Human Development Authority (KHDA) in Dubai, and the Department of Education and Knowledge (ADEK) in Abu Dhabi. These agencies evaluate schools and have compelled them to participate in the Trends in International Mathematics and Science Study (TIMSS) and the Program for International Student Assessment (PISA) test designed by the Organization for Economic Cooperation and Development (OECD). The government has placed increasing emphasis on the quality of education, notably listing “First-Rate Education System” as one of the UAE National Agenda goals for 2021 (UAE Vision 2021, 2018). The National Agenda goals for education portray a strategy focused on the structure of the school system, the efficiency and accountability of schooling, and students’ standardized test results. This increased participation in international comparative tests has not only allowed for academic comparison but has also given significant insights into the extent of marketization of the school system in the UAE.

Some distinct characteristics of the education system in the UAE are evident in international comparative data. For instance, the OECD PISA test includes an accompanying questionnaire called The OECD Teaching and Learning International Survey (TALIS) that asks principals, teachers, and students a range of questions about their school experiences. The results of TALIS illuminate the idiosyncrasies of the UAE education system. A few of the items ask students directly about the nature of the school, finding significant differences between the UAE and other countries. TALIS found that 84% of 15-year-old students in the OECD countries attend public schools, 12% attend government-dependent private schools, and just over 4% attend government independent private schools worldwide. Of the students in private schools, one-quarter attend private schools run by churches or religion organizations, about one-half attend schools run by not-for-profit organizations, and just less than one-quarter attend schools operated by for-profit organizations (OECD Publishing, 2016, p. 124). However, for students attending private schools in the UAE, approximately 70% of students attend for-profit private independent schools (OECD Publishing, 2016, p. 124). This suggests that the UAE is defined by high enrollment in private schools that do not fit the pattern of religious or non-profit private schools around the world. The UAE is thus atypical because private for-profits schools are prevalent in the country’s model for education.

The TALIS questionnaire also highlighted the significant use of accountability measures in the UAE compared to other countries. Principals and teachers in the UAE report higher levels of accountability measures than most other PISA-participating countries. On the TALIS principals’ questionnaire, principals report that most or all students in the UAE attend schools where various forms of evaluations are mandated including self-evaluation, external evaluation, written specifications of the school’s curricular profile, written specifications of student performance standards, systematic recording of data, and systematic recording of student test results and graduation rates (OECD Publishing,

2016, p. 14). In addition, the UAE is the only country surveyed by TALIS where teacher appraisal was found to be mandatory for all five types of teacher appraisal identified by the OECD: completion of probation, regular appraisal, teacher registration, appraisal for promotion, and reward schemes (OECD Publishing, 2016). In the UAE, across all types of schools, accountability measures require teachers to report large amount of data for school inspections. However, while government schools are subject to strict guidelines on curriculum, private schools have significant autonomy in deciding how they meet the expectations of government agencies. The expectations are related to health and safety, school facilities, fees and costs, school licensing, and the approval of changes to leaderships, tuition fees, and curriculum.

Owing to the limited information reported by the TALIS survey, more information is needed about how marketization is experienced in the UAE schools. As noted earlier, it is evident from the data that the majority of students in the country attend private schools, mostly run as for-profit businesses. For schools in the UAE, the highly decentralized nature of curriculum, staffing, teacher certification, student selection, fees, and many other aspects are juxtaposed with intense levels of accountability for teachers and large amount of data collected about students. The TALIS data demonstrate that teachers in the UAE are heavily accountable in the system of education, however, they have little voice in education policy as civil actors (Winchip, 2020). The international comparative data about education in the UAE from the TALIS questionnaire may give a glimpse into the school system of the country but it cannot describe the underlying conditions of the schools. The effects of marketization on teachers' work are evident, but not yet well-understood.

In the school system in the UAE, a lack of knowledge about teachers' experiences of marketization is particularly concerning as a focus on accountability and a market-based system may potentially alter some of the fundamental aspects of education. Apple (2000) identifies that the overwhelming focus on test scores, competition, markets and choice, accountability, performance objectives and standards drowns out the discussion about other facets of education. While accountability measures are intended to improve the quality of schools, previous researchers have found that prescriptive and top-down management of teachers' work, a narrow focus on measuring certain skills, and increased teacher surveillance and accountability often compromise the quality of education that students receive (Keddie et al., 2011). Market-based relationships change how people interact with each other. Robertson and Dale (2013) warn that redefining education by these types or relationships fundamentally alters how individuals perceive each other and the role of education in society. While policies in the UAE are intended to help schools meet parents' expectations and to achieve high ratings in school evaluation measures, these policies are created, interpreted, and enacted within the schools with consequences, including many which may not be intended. Ball (2012) argues that simply reading education policies or understanding the types of practices that are conducted in schools do not fully illuminate how policy is implemented in schools. Policy is made through the individual experiences of people as they interact with texts, events, and practices in their schools that demonstrate the wider social implications of

policies (Ball, 2012). Teachers' experiences of policy can tell a fuller story of the effects of marketization.

Unfortunately, teachers' experiences may not be given enough consideration when education policy is analyzed. Ball (2012) argues that teachers, other school staff, and even students may be written out of policy or seen simply as policy implementers rather than as key components of how policy occurs. However, teachers' experiences at schools and their perceptions of their work are important for understanding a workplace (Connell, 1985). The achievement of students is undeniably mediated by teachers and the effects of efficiency and accountability measures are primarily experienced by teachers. Hargreaves (1999) demonstrates that the conditions of teachers' work is inextricably linked to the experience of students, as teachers' professional development, career trajectories, professional relationships, status, reward, and school culture all affect the quality of their work in the classroom. Viewing the outcomes for schools or students as separate from the work of teachers is, at best, ignorant of how schools operate and, at worst, a way to obscure the nature of the link between student achievement and the experiences of teachers. Bullough and Hall-Kenyon (2011) argue that without an understanding of teachers' experiences in schools, "even the most well-intentioned of school reform efforts is likely to fail" (p. 128). Because of the nature of their role, teachers provide a necessary perspective on the challenges of the system that may not be visible otherwise. To find out more clearly how marketization is affecting teacher experiences in schools, we must ask the teachers about the conditions of their work to shed light on how policy is enacted at the school level in a market-based and business-oriented system.

2. Literature Review

The term marketization is used to describe the phenomenon when a service is offered within a market or is subject to market forces. In education, marketization has been used to describe a range of behaviors of educational governance and system-level decision-making (Whitty & Power, 2000). Verger et al. (2017) identified several different pathways to marketizing education systems such as privatization after catastrophe, privatization through school choice, and privatization due to ideology. The marketization of schools and the effects of marketization on teachers have been significantly theorized and studied in some contexts. Economists such as Milton Friedman (1997) have argued that education can be improved through principles of competition, choice, efficiency, and a profit motive, stating that it would "unleash the drive, imagination, and energy of competitive free enterprise to revolutionize the education process" (p. 341). Treating education outcomes as a market is believed to improve the overall quality of education through competition and attention to the needs and wants of each education consumer (Aurini, 2006, p. 15). Perceptions of the inefficiencies of the public school system would be eliminated as market forces are argued to increase innovation; discourage practices that parents find irrelevant; and unite the goals of parents, teachers, and students (Coulson, 1994). Other proponents of market-based education have focused on ways that competition and accountability are hypothesized to increase teacher quality. Hoxby

(2000) suggests that increasing competition would promote the demand for high-quality and motivated teachers and that competition alongside deregulation would make it unnecessary to rely on teacher certification programs. The competition between teachers and schools is extolled as the solution to underperforming education systems, promising to professionalize teachers and increase student outcomes. Through parent choice, teacher competition, and a profit motive for schools, education systems are theorized to benefit from the kind of free market that has created profitability and innovation in other sectors.

However, significant literature has detailed the ways that schools do not easily fit a business model. Kenway et al. (1993) describe how education has been redefined from a social good to an individual commodity as “*Buying* an education becomes a substitute for *getting* an education. Consumers seek the competitive edge at the expense of others” (Kenway et al., 1993, p. 116). Swapping educational democracy for consumer choice is a poor fit because schools do not exchange money for a product of student achievement. Smyth et al. (2000) describe the burden on teachers as they are pressured to dismiss the differences between the professional culture of teachers and the ideology and values of the business sector. While the ideas of reframing education in the image of business have been widely accepted in the discourse of education, “the supposed ‘proved superiority’ of the market economy is not backed up by any specific empirical data. Nevertheless, these ideas have a direct impact in the political arena” (Olmedo, 2013, p. 59).

The misfit of marketization and school culture has been found to have implications for teachers. Gewirtz (1997) argues that subjecting schools to markets, specific targets, and inspection comes with embedded values about what education is and its purpose. The social patterns of co-workers, supervisors, parents, and other people who affect the schools are interactions that constantly shift the balance of power through little points of control producing social patterns in schools (Ball, 2013). Devine-Eller (2004) describes the ways that teachers are monitored closely by parents, administrators, and the public, and that assessment of teachers compared to targets divides and controls teachers. In their everyday actions, teachers negotiate who controls their work and their autonomy (Ball, 2013). Teachers experience *governmentality* when how they are led and governed limits the actions they can take and how they fit into an organization (Davies & Bansel, 2007). Ball (2003) describes how teachers and their work are transformed through *performativity* when they are forced to set aside their personal beliefs and experiences in education to meet targets, indicators, or evaluations with which they may not agree. Ball (2013) notes that performativity is ingrained into teachers through surveillance. Teachers are encouraged to surveil themselves according to targets and are watched through increasing accountability measures.

Unfortunately, when teachers and schools focus on accountability measures, teachers may find that an orientation toward performance alters their sense of purpose as a teacher, the satisfaction they get from work, and their feelings of responsibility to their students (Ball, 2010). In previous literature, market forces on teachers have been found to change the character of teachers’ work and experiences at schools. However, much of this research has been conducted in countries with public systems and a small number

of private schools. While other systems demonstrate quasi-market schools or private influences, none have originated in systems composed of a majority private, for-profit schools. In context of the distinct system in the UAE, it is important to find out the ways in which marketization affects teachers within a highly market-oriented system.

3. Methodology

Teachers working in for-profit education management organizations were interviewed in June and July of 2016. A targeted sampling approach was taken to identify teachers who worked in schools run by three different for-profit education management organizations that managed schools in three different countries. This approach was taken so that any company-related or country-related idiosyncrasies were more evident and also the similarities across contexts were understood. Table 1 demonstrates the distribution of interview participants for each school in each city.

Table 1

Distribution of schools and interview participants by company and city

	Company A	Company B	Company C	Company D
East Asian City	1 school	1 school	2 schools 8 participants	
	1 participant	1 participant	8 participants	
Middle East City	31 schools (2 selected)	1 school		8 schools (1 selected)
	5 participants	2 participants		1 participant
England	4 schools (1 selected)*		1 school**	
	2 participants		2 participants	

Note. *Legally listed as independent non-profit schools, Company A also sponsors a Multi-Academy Trust.
**One International School with three branch campuses in England. This company also manages 39 other schools in England.

The interviews were conducted with a psychosocial approach (Hollway & Jefferson, 2000) with the aim of eliciting personal stories about teachers' experiences. The interview participants were prompted to tell stories about their work with questions such as "Tell me about your work," "What is a normal day like for you?," "What are your favorite/least favorite parts of your work?," and follow-up questions based on their answers. The data from those interviews were analyzed through content analysis and then guided the creation of questionnaire items. A pilot of some of the items was done in the UAE in November 2016 and the findings thereof are reported here. The nature of teachers' work questionnaire was administered with Online Surveys (formerly Bristol Online Survey) to teachers in the UAE in November and December 2016. Teachers were recruited to participate via social media platforms. The Sheikh Saud bin Saqr Al Qasimi Foundation for Policy Research assisted in distributing the questionnaire through its mailing list for educators. A total of 52 valid responses were collected. All respondents were employed in schools in the UAE. The respondents were 38 (73%) full-time teachers,

eight (15%) lead teachers/heads of department, two (4%) teaching assistants, and one part-time teacher. They were primarily women with 39 (75%) identifying as female, 12 (23%) as male, and one non-response. The teachers worked primarily in private schools with 39 (75%) categorizing their school as a private school, 11 (32%) as a government school, and two as working for other types of schools. The items were analyzed using the Mokken Scale Analysis (MSA; Sijtsma & van der Ark, 2017) and Rasch analysis (Rasch, 1960; Bond & Fox, 2015).

The analysis was conducted as a pilot to determine the usefulness of the items before a large-scale international data collection. For the initial analysis, MSA was used as an exploratory analysis. Sijtsma and van der Ark (2017) propose that MSA is useful for instrument development when an item set about a construct has been created, however, the items to be selected for a final scale need to be tested for sufficient psychometric quality. As a small sample of exploratory research, this non-parametric analysis was considered most suitable to assess the dimensionality of the underlying latent variable and to test a theory of scale construction. The automated item selection procedure of MSA finds items that are related and identifies subscales that occur within a set of items that are theorized to be related (Junker & Sijtsma, 2001). Through MSA, each item and the collection of items as a group are described by the coefficient Loevinger's H for the "scalability" of a set of items. The calculation is based on a Guttman-style analysis with a probabilistic rather than deterministic calculation and extended to be suitable for polytomous items.

Rasch analysis was used as the next step in determining the item hierarchy describing the relationship between the items. The basis of the Rasch model is that each respondent is characterized by an "ability" and each item can be described by a "difficulty." When the items fit a Rasch model, an item is "easier" for respondents to endorse when they demonstrate a higher "ability" and generally fits the pattern that low "ability" respondents will not endorse "difficult" items when they are unable to endorse "easy" items. If the items or respondents differ from this expectation more than should be expected by chance, then the item is not considered a part of the scale measuring a single variable. The relationship between a respondent's "ability" and "difficulty" on a set of related items then allows us to give each respondent a measurement on that scale (Bond & Fox, 2015). Mathematically, this relationship between "ability" and "difficulty" looks like the following for a dichotomous model:

$$\log e(P_{ni1}/P_{ni0}) = B_n - D_i,$$

where B_n is the ability of subject n , D_i is the difficulty of item i , P_{ni1} is the probability that subject n will succeed on item i , and P_{ni0} is the probability of failure ($1 - P_{ni1}$).

As this questionnaire included four response categories of *strongly agree*, *agree*, *disagree*, and *strongly disagree* throughout, it was a polytomous model. Therefore, the formula is related but the probabilities are calculated at each threshold (e.g., between *strongly disagree* and *disagree*) whether a respondent will endorse the adjacent category.

When more than two response categories are included, instead we have the Andrich rating scale model (Andrich, 1978):

$$\log e(P_{nij}/P_{ni(j-1)}) = B_n - D_i - F_j,$$

where the probability (P_{nij}) that person n of ability B_n is observed in category j of a rating scale applied to item i of difficulty D_i compared to the probability $P_{ni(j-1)}$ of the person being observed in category $j-1$, the adjacent category (e.g., *agree* instead of *strongly agree*).

I chose to combine MSA and Rasch analysis to gather more evidence that the items were related and that they measured a single latent variable.

4. Findings

The statistical software MSP5 (Molenaar & Sijtsma, 2000) and Winsteps (Linacre, 2017) were used to analyze the Likert-type scale items. The questionnaire received 52 responses. Teachers were asked their level of agreement (*strongly disagree*, *disagree*, *agree*, and *strongly agree*) with statements about the nature of their work. An analysis of the responses makes it possible to find patterns of experiences and the prevalence of certain aspects of teachers' work in the UAE. The analysis does not simply report the percentage of agreement with each item but considers the range of experiences of respondents and an individual's range of answers. The findings are presented in hierarchies to demonstrate that the items are related. The items at the bottom of each pyramid are most common and those at the top are related, but less common. Where a teacher was able to agree to an item in the middle of the pyramid, they are also likely to have agreed to all the items below that item. Regarding the two scales found in this dataset, the following section includes a description of the statistical quality of the scale, the Wright map, and the item hierarchy.

4.1. Scale 1 findings

A preliminary analysis using the MSA found two scales. Scale 1 was found to contain nine items, where <0.30 is considered unscalable and ≥ 0.50 is considered strongly scalable (Sijtsma & van der Ark, 2017). This scale had a Loevinger's coefficient of 0.48 and a reliability of 0.87. The lowest performing item of the set had a Loevinger's H coefficient of 0.33, which was considered acceptable to be included in the scale. This was considered a moderately scalable set of items with acceptable reliability to warrant Rasch analysis.

The Rasch analysis of the scale was conducted using Winsteps (Linacre, 2017). The items were tested iteratively for fit, productive contribution to measurement, local independence, and item bias through differential item functioning. Fit statistics indicate how the data fit the Rasch model. Infit and outfit statistics were used to identify problematic items using the criteria for rating scale survey items of 0.5–1.5. Although no items were excluded for high infit or outfit statistics, 10 respondents were excluded for high infit or outfit statistics. The final scale included seven items and 43 respondents.

The infit and outfit statistics were between 0.50 and 1.34 for all remaining items. The point-measure correlation indicated the correlation of the item to the overall score, demonstrating that all items contributed to the overall measure and that the items had a range of 0.71–0.91. In addition, person separation was used to classify people based on the items. This scale had a person separation of 2.57, where >2.00 was considered good. Person reliability in Rasch analysis is equivalent to traditional test reliability and item separation indicates the strength of the item hierarchy (Linacre, 2000). This scale had a person reliability of 0.87. The item separation of this scale was 3.04 and the item reliability was 0.90. This means that the person reliability was on the low side which means that the scale may be inadequate for high-stakes judgments, although it is suitable for preliminary analysis. The scale explained 63.5% of raw variance in the responses with 42.3% explained by persons and 21.2% explained by items. This is considered unidimensional as the unexplained variance was not significant. The rating scale thresholds were all ordered, meaning that respondents who reported higher ability to endorse the items indicated more agreement on more difficult items. The Andrich thresholds were -3.20, -0.03, and 3.24. Figure 1 shows the Wright map of the scale.

The Wright map demonstrates the distribution of responses against the items, the relative difficulty of the items, and the item labels. Figure 2 presents the detail about the content of each item. While the most common and easiest items to endorse are at the bottom of the figure, the most difficult and least common are at the top. At any point in the figure, if a respondent endorses an item, they are also likely to endorse all the items below it. If they cannot endorse an item, then they are unlikely to endorse the items above it in the figure.

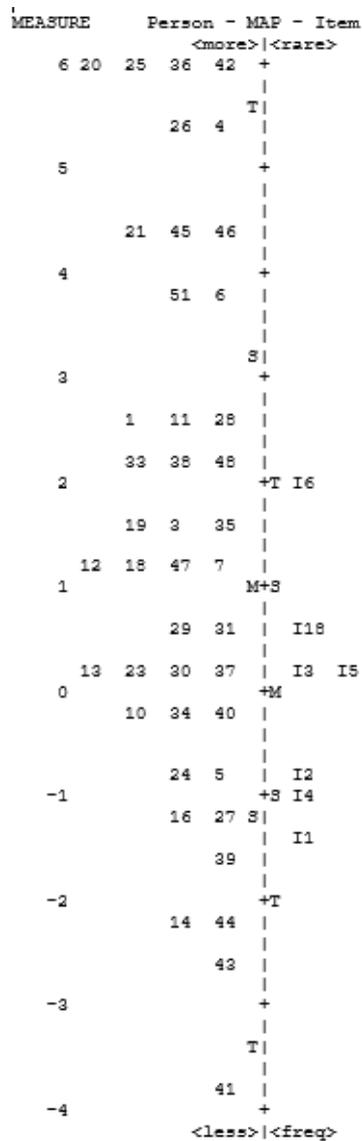
These items conceptually demonstrate the extent to which a school is marketized and run as a business. They are the characteristics of schools as perceived by the teachers within them and show the pattern of how different practices are related. A prominent theme in this scale is enrollment. The most common and easiest to endorse item was “My school enrolls as many students as possible.” Other enrollment issues were related but less common like enrolling students at many points in the school year, schools competing to enroll students, and the use of advertisement to enroll students. An interesting idiosyncrasy of this scale was that the item least likely to be endorsed was regarding the use of business-oriented language. This item was more difficult for respondents to endorse than the item stating that their school was being run on a business model. This may mean that schools in the UAE retain a school culture even when they are highly marketized. While the operation of a school may be business-oriented, the language in those schools may remain school-oriented, using terms like Head of School or principal instead of taking on terms like CEO.

4.2. Findings of Scale 2

A preliminary analysis with MSA found two scales. Scale 2 was found to contain 35 items, where <0.30 is considered unscalable and ≥ 0.50 is considered strongly scalable (Sijtsma & van der Ark, 2017). This scale had a Loevinger’s H coefficient of 0.43 and a reliability of 0.96. The lowest performing item of the set had a Loevinger’s H coefficient of

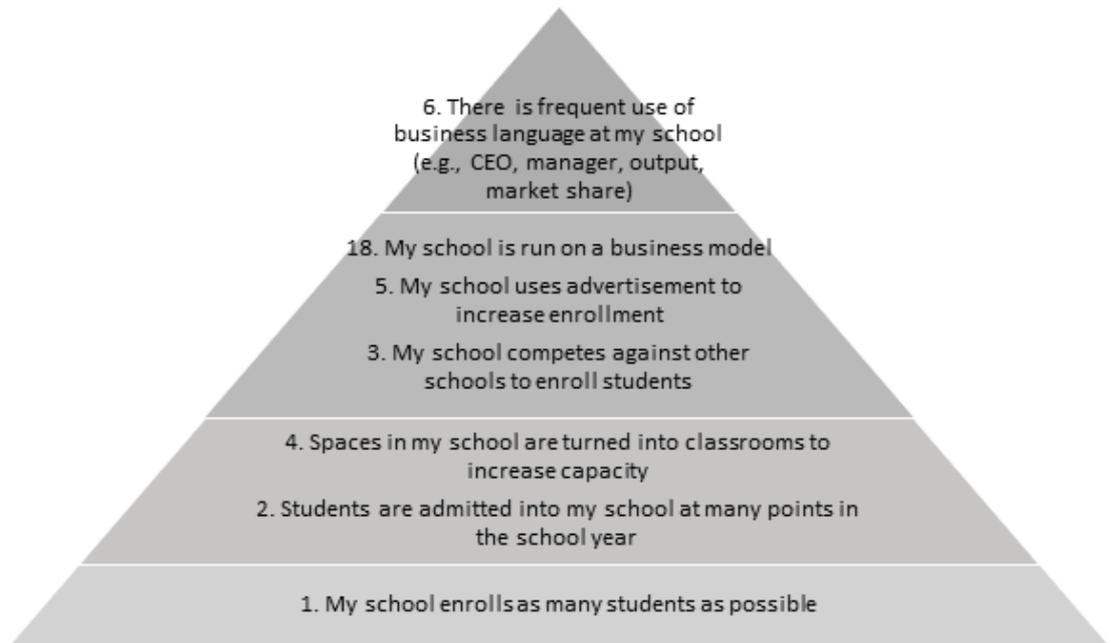
Figure 1

Wright map of Scale 1



0.31, which was considered acceptable to be included in the scale. This was considered a moderately scalable set of items with good reliability to warrant Rasch analysis.

The Rasch analysis of the scale was conducted using Winsteps (Linacre, 2017). The items were tested iteratively for fit, productive contribution to measurement, local independence, and item bias through differential item functioning. Fit statistics indicate how the data fit the Rasch model. Infit and outfit statistics were used to identify problematic items using the criteria for rating scale survey items of 0.5–1.5. Many items were excluded for high infit or outfit statistics and four respondents were excluded for high infit or outfit statistics. The final scale included 15 items and 48 respondents. The infit and outfit statistics were between 0.65 and 1.42 for the final scale. The point-measure correlation indicated the correlation of the item to the overall score, demonstrating

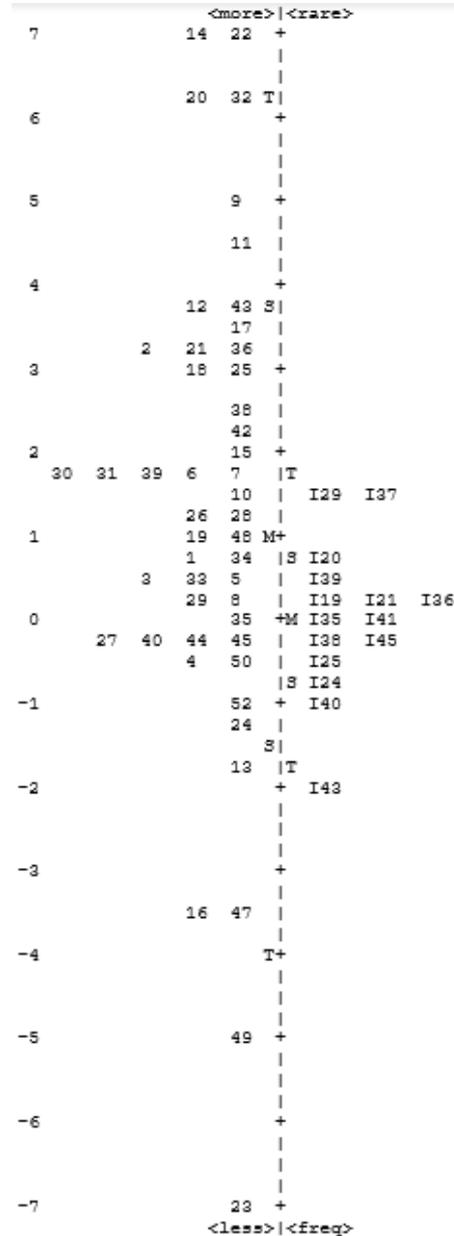
Figure 2*Item hierarchy for Scale 1*

that all items contributed to the overall measure and the items had a range of 0.71–0.87. Person separation was used to classify people based on the items. This scale had a person separation of 3.98, where >2.00 was considered good. Person reliability in Rasch analysis is equivalent to traditional test reliability and item separation indicates the strength of the item hierarchy (Linacre, 2000). This scale had a person reliability of 0.94. The item separation of this scale was 2.73 and the item reliability was 0.88. This means that the person sample was not large enough to confirm the difficulty of the ordering in the hierarchy of items and was not reliable enough to precisely locate the items on the latent variable in order. An item separation of >3.00 and a reliability >0.90 are considered more useful and this issue limits the usefulness of this dataset. The scale explained 65% of raw variance in the responses with 47.4% explained by persons and 17.6% explained by items. This is considered acceptable, although there was significant unexplained variance of 35.0%. The contrasts of unexplained variance indicated that it may be due to the dataset not being unidimensional with 6.4% of the variance in the first contrast and an eigenvalue of 2.72 when >2.0 was considered problematic. However, in this dataset, this may be due to some idiosyncrasies with how the rating scale was used by the respondents. The rating scale thresholds were all ordered, meaning that respondents who reported higher ability to endorse the items indicated more agreement on more difficult items. The Andrich Thresholds were -4.10, 0.81, and 3.29. Figure 3 shows the Wright map of the scale.

The Wright map demonstrates the distribution of responses against the items, the relative difficulty of the items, and the item labels. Figure 4 presents the detail about the content of each item. While the most common and easiest items to endorse are at the bottom of the figure, the most difficult and least common are at the top. At any point

Figure 3

Wright map of Scale 2



in the figure, if a respondent endorses an item, they are also likely to endorse all the items below it. If they cannot endorse an item, then they are unlikely to endorse the items above it in the figure.

These items together portray the aspects of how business influences within a school affect teachers’ work. The items elucidate the pattern of teachers’ experiences related to the marketization of a school based on teachers’ perceptions of their work. Different from Scale 1, which describes the direct influences on teachers of a school being run like a business, these items are indicative of the indirect effects or “second order effects” (Ball, 2012) on teachers of a marketized school culture. The effect on the work of

Figure 4*Item hierarchy for Scale 2*

teachers can be seen in the related items which contain three main themes: threats to professional judgment, hierarchy, and social pressure. The item which was most common and endorsed most easily by the respondents was "proving that learning has occurred sometimes takes away from actual learning." This item was found to be related to other types of threats to professional judgment that were more difficult to endorse like the respondents' experience not being valued in the school, consultants' opinions being valued more highly than teachers' opinions, and school administration making promises that the staff could not deliver. Hierarchical relationships were evident in the pattern through items about staff gaining recognition by *playing the game*, favoritism for certain staff members, administrators working on their career paths, consequences for staff members who question their superiors, and tense relationships between staff. The pattern of social pressure is evident in items about staff members taking the blame when school policies fail, a take it or leave it attitude at the school, staff members doing what they are told out of fear of repercussions, and staff members being denied contract renewal without reason.

5. Discussion

The results of this analysis demonstrate two patterns related to how teachers experience their work in the UAE. Across different experiences of many teachers in different schools, the findings illustrate a pattern of how the marketization of the school system directly and indirectly affects teachers' work in the UAE. While Scale 1 measures the degree to which a school is market-oriented, Scale 2 describes the indirect effects of policy similar to Ball's (2012) idea of "second order effects" of how clusters of policies change schools as places to work and learn in. The story these items tell is that teachers in the UAE experience the direct effects of a marketized school system and separately experience the indirect effects manifest in their interactions at their workplaces. The indirect effects demonstrate that teachers feel threats to their professional judgment, hierarchical relationships, and social pressures. These "micro-physics of power" (Ball, 2013) show the patterns of how small experiences contribute to an overall work experience in a school.

The TALIS questionnaire for teachers in the UAE shows the connections to the findings of this research. The significant percentage of students in private schools and especially for-profit private schools and notable accountability systems were identified as unique when compared against other participating countries. The patterns found in this research clarify the ways that teachers experience the accountability systems in their schools in the marketized system in the UAE. The indirect influences of marketization include a pattern of proving that learning has occurred to the point that it takes away from actual learning along with teachers feeling their professional judgment under threat. The marketized system in the UAE includes teachers' experiences of increasing enrollment in schools. High enrollment numbers mean that schools collect more fees and, in a for-profit school, that these schools increase their profitability. This direct relationship between enrollment and profit seems to completely dismiss the learning and achievement of students. While Hoxby (2000) presumes that schools in marketized systems will be driven to increase student results, at least the initial stage appears to be to increase enrollment without the direct connection to better student results. Coulson's (1994) prediction that marketization would cause schools to discontinue irrelevant practices may be refuted as the direct effect seems to be an increase in advertising and indirect influences including social pressures that are unrelated to education and potentially detrimental to school culture.

The system in the UAE does not automatically create improvements for students and can create barriers for teachers. Marketization has a pattern of significant indirect effects for teachers in how they experience their work. While proponents of marketization focus on the potential of increasing student results or improving education systems overall, ignoring the experience of teachers obscures some of the important ways that schools are altered. When teachers are integral to the system, these influences on teachers reveal the ways that a marketized system may be detrimental to schools overall.

This research provides an entry point into the experiences of teachers in schools in the UAE. Across diverse types of schools, the market-based approach affects teachers' work in patterned ways. Finding out these patterns and identifying the practices or policies within schools that create these conditions for teachers is the first step in

understanding how education in the UAE can be improved. With knowledge of how teachers experience their work, reforms can be made considering how teachers have been affected by previous policies. Future research should investigate other related influences on teachers' work across different types of schools for how teachers are affected by the marketization of their school and the ways that these business influences are exacerbated or mitigated by school leadership.

6. Limitations

Limitations of this research affect the generalizability and interpretation of the findings. As this paper is based on a pilot data collection, the number of responses is smaller than would be expected in a large-scale study. The small sample size influenced the quality of the scales that were produced. This is especially true in the case of Scale 2, which had significant unexplained variance. The purpose of the data was to develop the items and gather data about the context of the UAE while testing the items for a larger data collection. These results should be seen simply as evidence that these patterns exist in this dataset, pointing out the need for further research for evidence of generalization of these patterns.

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Competing Interests

The author has no competing interests to declare.

Biography

Dr. Emily Winchip is an Assistant Professor in the College of Education at Zayed University. She completed her PhD at the University of Nottingham in 2019, researching the work of teachers in marketized schools. She holds a Master of Education degree from the University of Illinois-Chicago in educational measurement, evaluation, statistics, and assessment and a Bachelor of Music Education degree from Western Illinois University. Dr. Winchip is an experienced educator having previously taught music at international schools in Kuwait and Dubai and public schools in Oregon, USA. Her research interests are arts education, the work of teachers, and the effect of marketization of schools on teachers. She is interested in feminist quantitative research methods that develop statistical models based on the lived experiences of people.

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